AMENDMENTS TO THE CLAIMS

Claim 1 (Canceled):

Claim 2 (Canceled):

Claim 3 (Canceled):

Claim 4 (Canceled):

Claim 5 (Canceled):

Claim 6 (Canceled):

Claim 7 (Canceled):

Claim 8 (Canceled):

Claim 9 (Canceled):

Claim 10 (Canceled):

Claim 11 (Canceled):

Claim 12 (Canceled):

Claim 13 (Canceled):

Claim 14 (Canceled):

Claim 15 (Canceled):

Claim 16 (Canceled):

Claim 17 (Canceled):

Claim 18 (Canceled):

Claim 19 (Canceled):

Claim 20 (Canceled):

Claim 21 (Canceled):

Claim 22 (Canceled):

Claim 23 (Canceled):

Claim 24 (Canceled):

Claim 25 (Canceled):

Claim 26 (Canceled):

Claim 27 (Canceled):

Claim 28 (Canceled):

Claim 29 (Currently amended): A weight-controlled vehicle, comprising:

a rider support for carrying a rider,

at least three wheels mounted below said rider support for carrying said rider support and for enabling said vehicle to roll when placed upon a riding surface,

said wheels being spaced to stably support said vehicle ~~and~~ in a statically stable mode to normally prevent said vehicle from tipping when placed upon said riding surface,

a motor and a power transmission for rotating at least one of said wheels for propelling said vehicle along said riding surface,

a speed control coupling attaching said rider support to lower components of said vehicle and arranged to enable said rider support

to tilt relative to said lower components, such tilting occurring in a generally forward or backward direction,

a speed control for enabling said rider to control the rolling speed of said vehicle in response to said forward or backward tilting of said rider support,

a steering control for enabling said rider to tilt said rider support in a generally side-to-side direction and in response to such tilting, steer said vehicle to the side in which said rider support is tilted when said vehicle rolls upon said riding surface,

said rider support having an upward facing surface of a size and shape predetermined to enable operation of said vehicle by a rider situated upon said rider support in a standing, sitting, or kneeling riding position,

said upward facing surface being generally free of upwardly extending protrusions which would otherwise substantially inhibit said rider from operating said vehicle in any of said riding positions,

whereby said rider may control the rolling speed and steered direction of said vehicle by appropriate tilting of said rider support when said rider is situated upon said rider support in any of said riding positions.

Claim 30 (Previously presented): The vehicle of claim 29 wherein said speed control includes:

a rolling direction reverser for enabling said motor to propel said vehicle forward when said rider support is tilted into the forward range of its tilting motion and backward when said rider support is tilted into the rearward range of its tilting motion,

whereby the direction that said vehicle rolls may be reversed in response to said forward or backward tilting of said rider support.

Claim 31 (Canceled): The vehicle of claim 29 wherein said speed control coupling includes:

an electrically responsive pressure sensing element to control said rolling speed of said vehicle in response to said forward and backward tilting of said rider support,

whereby a material with piezoelectric qualities may control said rolling speed of said vehicle in response to substantially minor said forward or backward tilting of said rider support.

Claim 32 (Previously presented): The vehicle of claim 29, further including:

at least one handlebar for stabilizing said rider while said rider is situated on said rider support,

said handlebar being removable from said vehicle for enabling said rider to operate said vehicle with hands free and to operate and store said vehicle with reduced encumbrance from said handlebar.

Claim 33 (Previously presented): The vehicle of claim 29, further including:

at least one handlebar for stabilizing said rider while said rider is situated on said rider support, and

a clamping articulation for tucking said handlebar to a lower, less obtrusive position for enabling said rider to operate said vehicle with hands free and to operate and store said vehicle with reduced encumbrance from said handlebar.

Claim 34 (Previously presented): The vehicle of claim 29, further including:

a steerable truck attached below said rider support by a steering union for enabling said steerable truck to pivot along a steering axis,

at least two of said wheels being truck wheels rotatably attached to the left and right extremities of said steerable truck and spaced to normally prevent said vehicle from tipping in a side-to-side direction,

said steering axis generally falling within a left-right facing plane and also being substantially inclined to translate said side-to-side tilting of said rider support into appropriate left or right turning motion of said steerable truck for causing said truck wheels to steer said vehicle to the left or right in response to said side-to-side tilting of said rider support,

at least one said remaining wheel being a drive wheel rotationally coupled to said motor by said power transmission for propelling said vehicle along said riding surface,

said drive wheel being located substantially in front or behind said truck wheels to prevent said vehicle from tipping in a front-to-back direction.

Claim 35 (Previously presented): The vehicle of claim 29 wherein at least one of said wheels is a drive wheel, and further including:

a steerable truck attached below said rider support by a steering union for enabling said steerable truck to turn to the left or right,

a steering linkage coupling said rider support to said steerable truck for turning said steerable truck to the left or right in response to said side-to-side tilting of said rider support,

said drive wheel being mounted to said steerable truck for steering said vehicle to the left or right when said steerable truck turns to the left or right in response to said side-to-side tilting of said rider support,

said motor also being mounted to said steerable truck and rotationally coupled to said drive wheel for propelling said vehicle along said riding surface.

Claim 36 (Previously presented): The vehicle of claim 29, further including:

a steering biasing spring constrained to deform when said rider support is tilted in said side-to-side direction, whereby said steering

biasing spring's resistance to deformation biases said vehicle to roll in a generally straight line in the absence of said side-to-side tilting of said rider support, and

a throttle biasing spring constrained to deform when said rider support is tilted in said forward or backward direction, whereby said throttle biasing spring's resistance to deformation biases said vehicle to cease rolling in the absence of said forward or backward tilting of said rider support.

Claim 37 (Currently amended): A weight-controlled vehicle, comprising:

a rider support for carrying a rider,

at least three wheels mounted below said rider support for carrying said rider support and for enabling said vehicle to roll when placed upon a riding surface,

said wheels being spaced to stably support said vehicle in a statically stable mode to ~~and~~ normally prevent said vehicle from tipping when placed upon said riding surface,

a motor and a power transmission for rotating at least one of said wheels and for propelling said vehicle along said riding surface,

a speed control coupling attaching said rider support to lower components of said vehicle and arranged to enable said rider support to tilt relative to said lower components, such tilting occurring in a generally forward or backward direction,

a speed control for enabling said rider to control the rolling speed of said vehicle in response to said forward or backward tilting of said rider support,

a steering control for enabling said rider to tilt said rider support in a generally side-to-side direction and in response to such tilting, steer said vehicle to the side in which said rider support is tilted when said

vehicle rolls upon said riding surface,
said rider support having a seat upon which a rider may sit while operating said vehicle,
whereby said rider may control the rolling speed and steered direction of said vehicle by appropriate tilting of said rider support when said rider is seated in said seat upon said rider support.

Claim 38 (Previously presented): The vehicle of claim 37 wherein said speed control includes:
a rolling direction reverser for enabling said motor to propel said vehicle forward when said rider support is tilted into the forward range of its tilting motion and backward when said rider support is tilted into the rearward range of its tilting motion,
whereby the direction that said vehicle rolls may be reversed in response to said forward or backward tilting of said rider support.

Claim 39 (Previously presented): The vehicle of claim 37, further including:
at least one handlebar for stabilizing said rider while said rider is situated on said rider support,
said handlebar being removable from said vehicle for enabling said rider to operate said vehicle with hands free and to operate and store said vehicle with reduced encumbrance from said handlebar.

Claim 40 (Previously presented): The vehicle of claim 37, further including:
at least one handlebar for stabilizing said rider while said rider is situated on said rider support, and
a clamping articulation for tucking said handlebar to a lower, less obtrusive position for enabling said rider to operate said vehicle with hands free and to operate and store said vehicle with reduced encumbrance from said handlebar.

Claim 41 (Currently amended): A weight-controlled vehicle, comprising:

rider support means for supporting the body of a rider,

at least three wheels enabling said vehicle to roll when placed upon a riding surface,

said wheels being spaced to stably support said vehicle in a statically stable mode to ~~and~~ normally prevent said vehicle from tipping when placed upon said riding surface,

propulsion means for propelling said vehicle along said riding surface,

speed control attaching means for attaching said rider support means to lower components of said vehicle and arranged to enable said rider support means to tilt relative to said lower components, such tilting occurring in a generally forward or backward direction,

speed control means for enabling said rider to control the rolling speed of said vehicle in response to said forward or backward tilting of said rider support means,

steering control tilting means for enabling said rider to tilt said rider support means in a generally side-to-side direction and in response to such tilting, steer said vehicle to the side in which said rider support means is tilted when said vehicle rolls upon said riding surface,

said rider support means having an upward facing area of an appropriate size and shape to enable operation of said vehicle by a rider situated upon said rider support means in a standing, sitting, or kneeling riding position,

said upward facing area being generally free of upwardly extending protrusions which would otherwise substantially inhibit said rider from operating said vehicle in any of said riding positions,

whereby said rider may control the rolling speed and steered direction of said vehicle by appropriate tilting of said rider support means when

said rider is situated upon said rider support means in any of said riding positions.

Claim 42 (Previously presented): The vehicle of claim 41 wherein said speed control means includes:
a rolling direction reversing means for enabling said propulsion means to propel said vehicle forward when said rider support means is tilted into the forward range of its tilting motion and backward when said rider support means is tilted into the rearward range of its tilting motion,
whereby the direction that said vehicle rolls may be reversed in response to said forward or backward tilting of said rider support means.

Claim 43 (Canceled): The vehicle of claim 41 wherein said speed control attaching means includes:
an electrically responsive pressure sensing element to control said rolling speed of said vehicle in response to said forward and backward tilting of said rider support means,
whereby a material with piezoelectric qualities may control said rolling speed of said vehicle in response to substantially minor said forward or backward tilting of said rider support means.

Claim 44 (Previously presented): The vehicle of claim 41, further including:
an upwardly extending support means with at least one hand grip area for said rider to hold on to and for facilitating the balance of said rider while said rider is situated on said rider support means,
said upwardly extending support means being removable from said vehicle for enabling said rider to optionally operate said vehicle with

hands free and to operate and store said vehicle with reduced encumbrance from said upwardly extending support means.

Claim 45 (Previously presented): The vehicle of claim 41, further including:
an upwardly extending support means with at least one hand grip area for said rider to hold on to and for facilitating the balance of said rider while said rider is situated on said rider support means,
a clamping articulation means for tucking said upwardly extending support means to a lower, less obtrusive position and for enabling said rider to operate said vehicle with hands free and to operate and store said vehicle with reduced encumbrance from said upwardly extending support means.

Claim 46 (Previously presented): The vehicle of claim 41, further including:
a steerable wheel mounting means attached below said rider support means by a steering union means for enabling said steerable wheel mounting means to pivot along a steering axis,
at least two of said wheels being truck wheels rotatably attached to the left and right extremities of said steerable wheel mounting means and spaced to normally prevent said vehicle from tipping in a side-to-side direction,
said steering axis generally falling within a left-right facing plane and also being substantially inclined to translate said side-to-side tilting of said rider support means into appropriate left or right turning motion of said steerable wheel mounting means for causing said truck wheels to steer said vehicle to the left or right in response to said side-to-side tilting of said rider support means,
at least one said remaining wheel being a drive wheel rotationally coupled to said propulsion means for propelling said vehicle along said riding surface,

said drive wheel being located substantially in front or behind said truck wheels to prevent said vehicle from tipping in a front-to-back direction.

Claim 47 (Previously presented): The vehicle of claim 41 wherein at least one of said wheels is a drive wheel and further including:
a steerable wheel mounting means attached below said rider support means by a steering union means for enabling said steerable wheel mounting means to turn to the left or right,
a steering linking means coupling said rider support means to said steerable wheel mounting means for turning said steerable wheel mounting means to the left or right in response to said side-to-side tilting of said rider support means,
said drive wheel being mounted to said steerable wheel mounting means for steering said vehicle to the left or right when said steerable wheel mounting means turns to the left or right in response to said side-to-side tilting of said rider support means,
said propulsion means also being mounted to said steerable wheel mounting means and rotationally coupled to said drive wheel for propelling said vehicle along said riding surface.

Claim 48 (Previously presented): The vehicle of claim 41, further including:
steering biasing means for causing said vehicle to roll in a generally straight line in the absence of said side-to-side tilting of said rider support means, and
throttle biasing means for causing said vehicle to cease rolling in the absence of said forward or backward tilting of said rider support means.

Claim 49 (Previously presented): An apparatus, comprising:

a plurality of at least three motive structures contacting a surface with said motive structures disposed in a non-linear arrangement;

a motive source, coupled to at least one motive structure, for moving said at least one motive structure to translate the apparatus in both a first direction over said surface and in a directly opposed second direction over said surface;

a steering control for setting said first direction; and

a rider platform, pivotally coupled to said motive structures and having at least two orthogonal axes of motion relative to said motive structures including a pitch attitude and a roll attitude wherein said steering control is responsive to said roll attitude and wherein said motive source is responsive to said pitch attitude.

Claim 50 (Previously presented): The apparatus of claim 49 wherein said non-linear arrangement includes generally an isosceles triangle having three vertices with one of said motive structures at each said vertex.

Claim 51 (Previously presented): The apparatus of claim 50 wherein said triangle includes a first side and a second side of equal length to said first side with a particular one vertex at a point of intersection of said first side and second side wherein said motive structure at said particular one vertex coupled to said steering control effects said first direction.

Claim 52 (Previously presented): The apparatus of claim 51 wherein said motive structure at said particular one vertex rotates about an axis perpendicular to said first direction when moving in said first direction and wherein said steering control rotates said axis relative to said rider platform to effect said first direction.

Claim 53 (Previously presented): An apparatus, comprising:

no more than three wheels contacting a surface with said wheels disposed in a triangular arrangement having a particular one vertex of said triangular arrangement being a forward-most vertex and a particular one wheel located at said forward-most vertex being a steering wheel;

a motive source, coupled to at least one wheel, for moving the apparatus in both a first direction over said surface and in a directly opposed second direction over said surface by rotating said at least one wheel in a first rotation for said first direction and rotating said at least one wheel in a second rotation for said second direction;

a steering control, coupled to said steering wheel, for setting said first direction; and

a generally planar rider platform, pivotally coupled to said motive structures and extending an entire length of the apparatus, said rider platform having at least two orthogonal axes of motion relative to said wheels including a pitch attitude and a roll attitude wherein said steering control is responsive to said roll attitude to set said first direction and said second direction and wherein said motive source is responsive to said pitch attitude to move the apparatus forward in said first direction and backward in said second direction with a forward velocity and a backward velocity responsive to a magnitude of pitch deviation from a neutral position.

Claim 54 (Previously presented): A method of operating an apparatus, the method comprising:

a) pitching a rider platform forward from a neutral position to a forward pitched angle, said rider platform pivotably coupled to a plurality of structures supporting said rider platform above a surface wherein a

forward speed of the rider platform in a forward direction over said surface is directly related to a magnitude of said forward pitched angle; and

b) pitching said rider platform backward from said neutral position to a backward pitched angle wherein a backward speed of said rider platform in a backward direction over said surface is directly related to a magnitude of said backward pitched angle; and

c) rolling said rider platform to starboard from said neutral position to a starboard pitched angle wherein a starboard turning rate of said forward direction and a port turning rate of said backward direction are directly related to a magnitude of said starboard pitched angle; and

d) rolling said rider platform to port from said neutral position to a port pitched angle wherein said port turning rate of said forward direction and said starboard turning rate of said backward direction are directly related to a magnitude of said port pitched angle and wherein said rider platform is biased to said neutral position with said neutral position producing zero for said forward speed, said backward speed, said starboard turning rate and said port turning rate.

Claim 55 (Previously presented): A method of using a vehicle for carrying a person, the method comprising:

a) assuming a position on a platform that supports the person, said platform biased to a neutral position and moveably mounted relative to a motive system including a motorized drive that propels said platform over an underlying surface through motion of at least one ground-contacting member of said motive system; and

b) pitching said platform from said neutral position to variably control both a forward speed and a backward speed of said platform over said underlying surface directly responsive to a magnitude of a pitch angle

of said platform relative to said motive system; and

c) rolling said platform from said neutral position to variably control both a starboard turning rate and a port turning rate of said platform as it moves at said forward speed and said backward speed, said turning rates directly responsive to a magnitude of a roll angle of said platform relative to said motive system.